

CS35 Workshop Manual

supplemental Restraint System

CS35RM2H/3/1

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Supplemental Restraint System

4.2 Supplemental Restraint System

2012 CS35

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Specification

Torque Specifications

Description	Nm	lb-ft	lb-in
Passenger airbag retaining bolt	15	11	-
Airbag control module retaining bolt	8	-	71
Airbag wiring harness ground bolt	8	-	71
Impact sensor retaining bolt	10	-	89



Description and Operation System Overview

▲ WARNING: The vehicle is equipped with supplemental restraint system, and failure to follow the correct procedures will lead to the following: a. Unexpected airbag deployment. b. The supplemental restraint system does not function when it's needed.

WARNING: Observe the following guidelines strictly to avoid the situation above: a. Before the start of work, make sure if you are undergoing maintenance operations around the supplemental restraint system components or on the circuits of them. b. If you are undergoing maintenance operations around the supplemental restraint system components or on the circuits of them, you should shut down the supplemental restraint system.

Supplemental restraint system (SRS AIRBAG) is a safety device used in conjunction with seat belts. The airbag can not replace the role of seat belts. Driver and passengers shall wear safety belts all the time and adjust to the most comfortable state according to the body conditions.

↑ CAUTION: The supplemental restraint system can not replace the role of seat belts. Failure to wear a seat belt may cause serious personal injury when airbag deployment. Changan Auto reminds you of wearing seat belts when traveling by car. Only when your seat belts are fastened, the supplemental restraint system can provide a better assistant protection for the crew when crashing.

The supplemental restraint system is designed for protecting the driver and front passengers when vehicles endure severe frontal collision. In case of collision, the sensor sends a collision signal to the airbag controller which can judge if the minimum requirement of the airbag inflation is met according to the degree of collision and then issues the ignition command to inflate the airbag, quickly forming a soft air bag filled with air between passengers and interior structures (such as steering wheel, instrument panel and trim plates, etc.), buffering and absorbing collision energy under the damping action of airbag, and at the same time the seat belt pretensioner work, realizing the purpose of mitigating the injury to the passengers.

The supplemental restraint system is composed of the following components:

- Airbag indicator
- Airbag control module (SDM)
- Instrument assembly
- Driver side impact sensor
- Passenger side impact sensor
- Driver airbag
- Passenger airbag
- Driver side airbag
- Passenger side airbag
- Driver side pretensioner seat belt
- Passenger side pretensioner seat belt

The supplemental restraint system provides a secondary protection except for seat belts for the crew. It is a passive safety system. The supplemental restraint system consists of multiple inflatable protection modules. They are distributed in different locations on the vehicle, including the steering wheel, instrument console and seats. Each inflatable module has a explosion loop which is controlled by the airbag control module.

The airbag control module implements a continuous diagnostic monitoring to the electrical components of the supplemental restraint system. If the system detects a failure, the airbag control module will set a fault diagnosis code and turn on the airbag indicator to remind the driver. The airbag control module will judge the severity grade of the collision. If the signal value is greater than the memory settings, the airbag control module will give off a ignition instruction to spread the corresponding inflatable modules of the supplemental restraint system.

After confirming the collision signal, the airbag control module (SDM) will send a "collision unlock and fuel cut-off" signal to BCM. After receiving the signal, BCM and ECM will execute the unlock and fuel cut-off function separately.

Component Description

Airbag Indicator

The airbag indicator is located within the instrument assembly. It is used for reminding the driver of the fault of the supplemental restraint system and test whether the airbag control module is communicating with instrument panel. When turning the ignition switch to position "ON", make sure the indicator is on. 4 seconds later, the indicator is off. If the indicator is still on or flashing at this time, the fault existing in the circuit of the supplemental restraint system must be tested. When there is no fault in the circuit of the supplemental restraint system, the indicator will go off after a 4 s long bright.

WARNING: If there is a failure in the supplemental restraint system, it may cause the airbag can not be deployed, or deploy the airbag when the collision does not reach the severity setting degree. If the airbag indicator is on, please go to the Changan Automobile authorized service stations for maintenance as soon as possible; the airbag indicator won't go off before the completion of fault repair.

Airbag Control Module (SDM)



WARNING: The airbag control module (SDM) is equipped with the backup power supply, which makes the airbag deploy successfully even in case of the battery voltage loss during the crash.



WARNING: Disconnect the battery negative cable for more than 60 seconds before the operation on the airbag.



WARNING: In order to prevent the unexpected airbag deployment causing personal injury, do not treat the undeployed airbag module as conventional plant waste. Use the deployment program to scrap the undeployed airbag module safely. If the sealed container in the scrap process is damaged, some materials within the undeployed module may cause serious illness or personal injury.

The airbag control module (SDM) is a microprocessor which controls the center of the

supplemental restraint system. When the crash occurs, the airbag control module will compare the detected collision signal with the value in the memorizer, when the signal generated exceeds the value in the storage, the airbag control module will give every ignition circuit a ignition order (current signal) to deploy the airbag. When the airbag is deploying, the airbag control module will record the situation of the supplemental restraint system and turn on the airbag indicator in the instrument circuit. After the car starts, the airbag control module will execute continuous diagnostic monitoring to the electrical components and wiring of the supplemental restraint system. If a failure is detected, the airbag control module will store a fault diagnosis code and turn on the airbag indicator to inform the driver that there is a fault.

Side Impact Sensor

The side impact sensor is used to acquire the lateral acceleration signal in case of an impact and transmit the signal to the airbag control module to judge whether the airbag should be ignited.

Driver Airbag, Passenger Airbag



WARNING: When transporting the undeployed airbag module: a. Shall not carry the handling wires or connectors of the airbag module. b. Ensure that the airbag opening is not facing you or other people.

The driver airbag and passenger airbag consist of a shell, inflatable airbags, an ignition device for igniting and the gas generating agent. When occurring a face collision and the impact of the collision is large enough, the airbag control module will give ignition loop an ignition order and deploy the airbag. The gas generated in the reaction makes the airbag expand rapidly. The gas generated from this action inflates the airbag quickly. Once the airbag is filled with gas, it will release the gas through the release holes of the airbag. There is a short circuit slice in the wiring harness connector terminal of the airbag control module (driver airbag, passenger airbag deployment loop). When the connector is disconnected, the short circuit bar will connect the airbag inflation module to deploy the loop, in order to prevent an unexpected airbag deployment during the maintenance.

Side Airbags at Driver's Side and Passenger's Side

The side airbags at driver's side and passenger's side are located on the back of the driver seat and passenger seat respectively. The SRS curtain airbag module consists of the airbag, ignition device and gas propellant. The igniter is a part of the deployment loop of the SRS curtain airbag module. When the vehicle encounters a side impact with adequate force, the side impact sensor will detect this impact and send a signal to the airbag control module. The airbag control module will compare the signal from the side impact sensor with the settings in the memory. When the generated signal exceeds the stored value, the airbag control module will issue the ignition command to deploy the SRS curtain airbag. In case of impact at passenger's side, the curtain airbag at driver's side is required to deploy and the curtain airbag at passenger's side to ignite. The airbag control module constantly monitors the deployment loop for malfunction and will illuminate the airbag indicator lamp once a malfunction occurs. There is a short circuit slice in the wiring harness connector terminal of the airbag control module (each curtain airbag deployment loop). A short-circuit slice can short the deployment loop of the curtain airbag module to prevent accidental deployment during the servicing.

Clock Spring



▲ WARNING: Wrong installation of the clock spring assembly could lead damage to the internal spiral coil and the coil fault causing the airbag module failure and personal injury.

The airbag clock spring is in the steering column and on the bottom of the steering wheel. The clock spring can keep constant electric contact between the driver deployment loop and the driver airbag when the steering wheel rotates.

Airbag Wiring Harness System

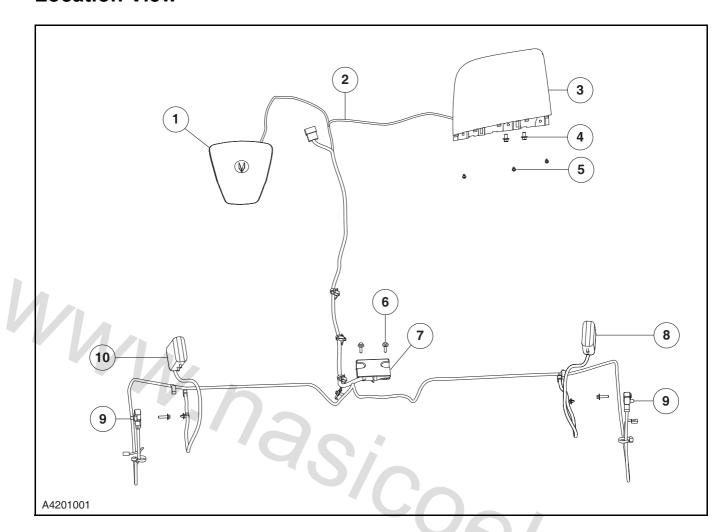
The airbag system wiring harness connects the control unit, inflatable module, deployment loop and data circuit via waterproof connectors. The deployment loop wiring harness supplemental restraint system is yellow. To service the supplemental restraint system wiring harness, please follow the corresponding test and circuit repair procedures in this manual.

Driver Side Pretensioner Seat Belt, **Passenger Side Pretensioner Seat Belt**

The driver side pretensioner seat belt and passenger side pretensioner seat belt each consists of a housing, an ignition device and gas generant. The igniter is a part of the seat belt pretensioner deployment loop. In case of collision with adequate frontal or side impact force, the airbag control module will issue the ignition command (current signal) and the current will flow through the igniter to ignite the gas propellant, thus producing a great deal of gas quickly. The gas from this action will extend to the seat belt retractor module, quickly retracting the belt. A short-circuit slice is installed to the wiring harness connector terminal of the airbag control module (deployment loop of each seat belt pretensioner force limiter). The short-circuit slice can short the deployment loop of the pretensioner force limiter to prevent accidental deployment of the limiter during the servicing.

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Location View



Item	Description	Qty.	Item	Description	Qty.
1	Driver airbag module (DAB)	1	6	Hexagon flange bolt	4
2	Airbag wiring harness assembly	1	7	Airbag controller	1
3	Passenger airbag module (PAB)	1	8	Front seat side airbag (right)	1
4	Hexagon flange bolt	2	9	Side impact sensor	2
5	Tapping screw	3	10	Front seat side airbag (left)	1

Symptom Diagnosis and Testing

General Equipment

Digital Multimeter

Changan Auto Special Diagnostic Tool

Inspection and Verification

WARNING: When storing the inactivated airbag module, make sure that the airbag opening is not towards to the surface of the control module. Do not allow the airbag opening face down. Do not place any load on the airbag module. There shall be adequate space around the airbag to allow for its accidental deployment, otherwise it may cause personal injury.

WARNING: Do not put the inactivated airbag module in the water or contact other liquids.

WARNING: Do not put the inactivated airbag module in the place where is near fire or in hot environment. Failure to follow these instructions may result in personal injury.

- 1. Verify the customer concern.
- 2. Visually inspect for obvious signs of mechanical and electrical damage, whether there are obvious signs of collision or not.

	ment. Failure to follow may result in personal
1. Verify the customer	concern.
mechanical and ele	for obvious signs of ectrical damage, whether gns of collision or not.
Visual Inspection Chart	
Mechanical	Electric
	•Circuit
	•Driver airbag
•Steering wheel	Passenger airbag
•Instrument panel	•Side airbag
assembly	•Clock spring
	•Instrument
	•SDM

3. Inspect the visible airbag system cables.

The wiring harness connectors and fulcrum of vibration are the main positions, which should be thoroughly inspected, and if the malfunction is caused by vibration, it is suggested that man can vibrate the possible failed position with fingers and inspect whether there is any malfunction.

- Shake the connector in the vertical and horizontal directions gently.
- Shake the wiring harnesses in the vertical and horizontal directions gently.
- 4. If an obvious cause for an observed or reported concern is found, correct the cause before proceeding to the next step.
- 5. If the cause is not visually evident, verify the symptom and refer to the Symptom Chart.

Symptom Chart

If there is a symptom but no diagnosis trouble code (DTC) is stored in control module and can not confirm symptom reasons in basic inspect, it is necessary to diagnosis and eliminate the symptoms in the following chart.

Symptom	Possible Sources	Solutions	
	•Fuse	Refer to: When Ignition	
	Circuit fault	Switch Is ON, Airbag Indicator Not ON (4.3.2 Instrument,	
The airbag indicator is not on	•Instrument	Symptom Diagnosis and Test-	
	•SDM circuit	ing).	
	•SDM control module		
	•Fuse and circuit	Refer to: Abnormal Airbag	
The airbag indicator blinks	Collision occurred record	Indicator Diagnosis (4.2. Supplemental Restraint Sys	
	•Non-standard operation is performed	tem, Symptom Diagnosis and Testing).	
and has been on	•The SDM control module records the times of collisions beyond the regulation		
	•SDM control module		
	•Fuse and circuit	Refer to: Airbag Indicator	
The airbag indicator is always on	•Instrument	Always ON Diagnosis (4.2.1 Supplemental Restraint Sys-	
	•SDM control module	tem, Symptom Diagnosis and	
	•Battery	Testing).	

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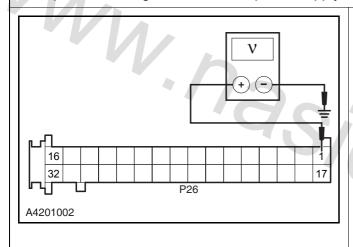
Abnormal Airbag Indicator Diagnosis

WARNING: Disconnect the battery negative cable for 60 seconds before the operation on the airbag.

Test Conditions	Details/Results/Solutions
1. General inspection	
	A.Inspect the wiring harness connectors of the clock spring, SDM control module and Instrument for damage, poor contact, aging and loose. Is it normal? Y Go to step 2. N Repair the fault.
2. Inspect the state of Instrument airbag indicato	r
2. Inspect the state of instrument alroay indicato	A.Turn the ignition switch to the position "ON", execute the self-test of the airbag indicator. Is the airbag indicator always on, after it blinks? Y Go to step 3. N Repair when the airbag indicator is not on. Refer to: When Ignition Switch Is ON, Airbag Indicator Is Not ON (4.3.2 Instrument, Symptom Diagnosis and Testing). Repair when the airbag indicator is always on. Refer to: Airbag Indicator Always ON Diagnosis (4.2.1 Supplemental Restraint System, Symptom Diagnosis and Testing).
3. Clear the historical DTC of the supplemental r	estraint system
	 A.Connect the Changan Automobile special diagnostic tool. B.Turn the ignition switch to "ON" and read and clear the historical DTC of the supplemental restraint system. C.Start the motor and run it for 5 min. Meanwhile turn the steering wheel all the way to the left and right several times. Is there still the phenomenon, that the airbag indicator blinks and has been on? Y Confirm the maintenance is finished. N Go to step 4.

Supplemental Restraint System

Test Conditions	Details/Results/Solutions
4. Read the DTC of the supplemental restraint syst	em
	A.Connect the Changan Automobile special diagnostic tool.
	B.Turn the ignition switch to "ON" and read the DTC of the supplemental restraint system on the special diagnosis tool.
	Are there any DTCs of the supplemental restraint system?
	Υ
	Repair according to the instruction of DTCs.
	Refer to: DTC Diagnosis (4.2.1 Supplemental Restraint System, DTC Diagnosis and Testing).
	N
	Go to step 5.
5. Inspect the airbag control module power supply	circuit



- A. Turn the ignition switch to position "LOCK" and disconnect the battery negative cable.
- B.Disconnect the wiring harness connector P26 of the airbag control module.
- C.Connect the battery negative cable and turn the ignition switch to "ON" position.
- D.Measure the voltage of the terminal 1 of the airbag control module wiring harness connector P26.

Standard Voltage Value: 11 ~ 14 V

Is the voltage normal?

Υ

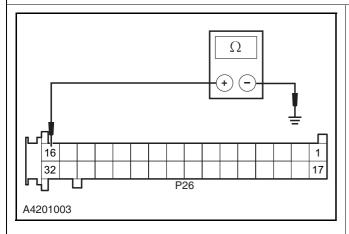
Go to step 6.

Inspect and repair the open circuit fault between the terminal 1 of the airbag control module wiring harness connector P26 and the ground point G105.

Test Conditions

Details/Results/Solutions

6. Inspect the ground circuit of the airbag control module



W.Na

- A.Turn the ignition switch to position "LOCK" and disconnect the battery negative cable.
- B.Disconnect the wiring harness connector P26 of the airbag control module.
- C.Measure the resistance between the terminal 16 of the airbag control module wiring harness connector P26 and the ground point wiring harness.

Standard Resistance Value: less than 5 Ω

Is the resistance value normal?

Υ

Go to step 7.

Ν

Repair the ground circuit of the airbag control module.

7. Replace the airbag control module

- A.Turn the ignition switch to position "LOCK" and disconnect the battery negative cable.
- B.Replace the airbag control module.

Refer to: Airbag Control Module (4.2.1 Supplemental Restraint System, Removal and Installation).

/e/ec.//

Verify the system is normal.

Airbag Indicator Always ON Diagnosis

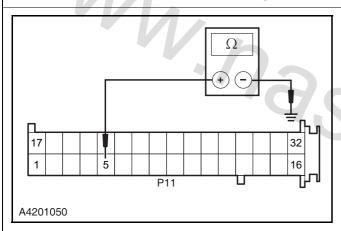


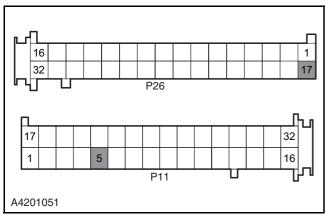
WARNING: Disconnect the battery negative cable for more than 60 seconds before the operation on the airbag.

Test Conditions	Details/Results/Solutions
1. General inspection	
	A.Inspect the wiring harness connectors of the clock spring, SDM control module and Instrument for damage, poor contact, aging and loose.
	Is it normal?
	Y
	Go to step 2.
	N
	Repair the fault.
2. Inspect the battery voltage	
2. Inspect the battery voltage	A.Turn the ignition switch to "ON" and inspect the voltage at the positive cable of the battery with a multimeter.
	Standard Voltage Value: 11 ~ 14 V
· //2	B.Start the engine and keep the engine speed at 2,000 rpm. Inspect the voltage at the positive cable of the battery with a multimeter.
4,1	Standard Voltage Value: 11 ~ 16 V
	Is the battery voltage normal?
	Y
	Go to step 3.
	N
	Inspect and repair the battery performance.
	Refer to: Battery Charing Voltage Too Low or Too High (3.1.10 Charging System Symptom Diagnosis and Testing).

Test Conditions	Details/Results/Solutions	
3. Read the DTC of the supplemental restraint syst	estraint system	
	A.Connect the Changan Automobile special diagnostic tool.	
	B.Turn the ignition switch to "ON" and read the DTC of the supplemental restraint system on the special diagnosis tool.	
	Are there any DTC of the supplemental restraint system?	
	Y Repair according to the instruction of DTCs.	
	Refer to: DTC Diagnosis (4.2.1 Supplemental Restraint System, DTC Diagnosis and Testing).	
1/1.	N Go to step 4.	

4. Inspect the circuit between the airbag control module and the Instrument





- A.Turn the ignition switch to position "LOCK" and disconnect the battery negative cable.
- B.Disconnect the Instrument wiring harness connector P11.
- C.Disconnect the wiring harness connector P26 of the airbag control module.
- D.Measure the resistance value between the terminal 5 of the Instrument wiring harness connector P11 and the ground point.

Standard Resistance Value: 10 $M\Omega$ or more

E.Measure the resistance value between the terminal 5 of the Instrument wiring harness connector P11 and the terminal 17 of the ABS control module wiring harness connector P26.

Standard Resistance Value: less than 5 Ω

Is the resistance value normal?

Υ

Go to step 5.

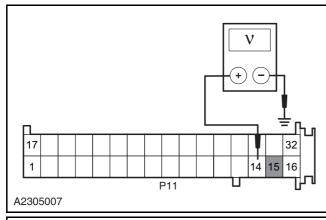
N

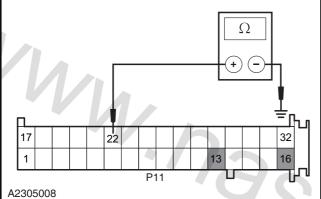
Inspect and repair the short or open circuit fault between the airbag control module and the Instrument.

Test Conditions

Details/Results/Solutions

5. Inspect the Instrument assembly - power supply and ground





- A.Turn the ignition switch to the "LOCK" position and disconnect the battery negative wiring harness.
- B.Disconnect the Instrument wiring harness connector P11
- C.Turn the ignition switch to the "ON" position,with a multimeter inspect the power supply circuit of the terminal 14 and 15 of the Instrument wiring harness connector P11.

Standard Voltage Value: 11 ~ 14 V

D.Turn the ignition switch to "LOCK" position, with a multimeter inspect the ground circuit of the terminal 13, 16 and 22 of the Instrument wiring harness connector P11.

Standard Resistance Value: less than 5 Ω

Is it normal?

Υ

Go to step 6.

Ν

Repair the circuit.

6. Replace the Instrument

- A.Turn the ignition switch to position "LOCK" and disconnect the battery negative cable.
- B.Replace the Instrument.

Refer to: Instrument (4.3.2 Instrument, Removal and Installation).

Is the system normal?

Υ

Confirm the maintenance is finished.

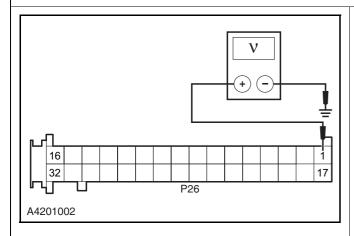
Ν

Go to step 7.

Test Conditions

Details/Results/Solutions

7. Inspect the airbag control module power supply circuit



- A.Turn the ignition switch to position "LOCK" and disconnect the battery negative cable.
- B.Disconnect the wiring harness connector P26 of the airbag control module.
- C.Turn the ignition switch to "ON" position, and connect the battery negative cable.
- D.Measure the voltage of the terminal 1 of the airbag control module wiring harness connector P26.

Standard Voltage Value: 11 ~ 14 V

Is the voltage normal?

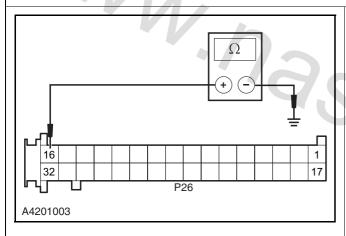
Υ

Go to step 8.

Ν

Repair the power circuit of the airbag control module.

8. Inspect the ground circuit of the airbag control module



- A.Turn the ignition switch to "LOCK" position and disconnect the battery negative cable.
- B.Disconnect the wiring harness connector P26 of the airbag control module.
- C.Measure the resistance value between the terminal 16 of the airbag control module wiring harness connector P26 and the ground.

Standard Resistance Value: less than 5 Ω

Is the resistance value normal?

Υ

Go to step 9.

N

Inspect and repair the open circuit fault between the terminal 16 of the airbag control module wiring harness connector P26 and the ground point G105.

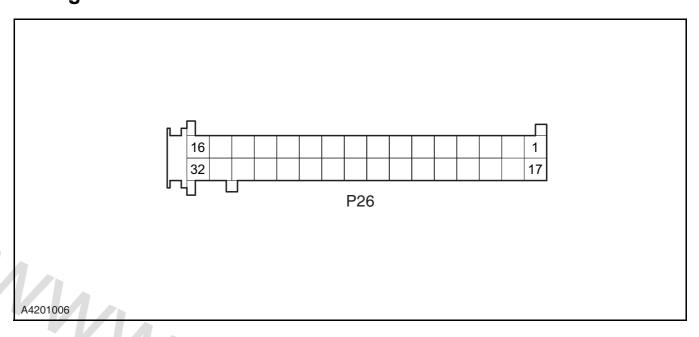
9. Replace the airbag control module

- A.Turn the ignition switch to position "LOCK" and disconnect the battery negative cable.
- B.Replace the airbag control module.

Refer to: Airbag Control Module (4.2.1 Supplemental Restraint System, Removal and Installation).

Verify the system is normal.

DTC Diagnosis and Testing Airbag Control Module Terminal List



Terminal No.	Connection	Terminal Description
P26-1	0.5 OG	Ignition switch power supply (IG1)
P26-2	1/2/2	-
P26-3	0.5 LG	Driver airbag control power
P26-4	0.5 LG/BK	Driver airbag ground signal
P26-5	0.5 GN/PK	Passenger airbag ground signal
P26-6	0.5 GN/VT	Passenger airbag control power
P26-7	0.5 GY/WH	Driver side seat belt pretensioner power signal
P26-8	0.5 GY/GN	Driver side seat belt pretensioner ground signal
P26-9	0.5 VT	Passenger side seat belt pretensioner ground signal
P26-10	0.5 BU	Passenger side seat belt pretensioner power signal
P26-11	0.5 YE/BK	Driver side airbag power signal
P26-12	0.5 YE/RD	Driver side airbag ground signal
P26-13	0.5 GN/BN	Passenger side airbag ground signal
P26-14	0.5 GN/BU	Passenger side airbag power signal
P26-15	-	-
P26-16	0.5 BK	G105 ground line
P26-17	0.3 BN	Fault alarm indication signal
P26-18	0.5 RD	Driver side impact sensor power signal
P26-19	0.5 RD	Driver side impact sensor ground signal

Terminal No.	Connection	Terminal Description
P26-20	-	-
P26-21	-	-
P26-22	0.5 OG/GN	DLC
P26-23	-	-
P26-24	-	-
P26-25	-	-
P26-26	0.5 OG/BK	Oil cut-off collision signal
P26-27	0.5 BK	Passenger side impact sensor power signal
P26-28	0.5 YE	Passenger side impact sensor ground sig- nal
P26-29	-	-
P26-30	-	-
P26-31	-	-
P26-32	<u>-</u>	

Diagnostic Trouble Code (DTC) Type

Fault type	Definition	
Type 1	Type 1 indicates power supply fault. Diagnostic path of power supply fault: carry out the self-test with the ignition in the "ON" position for at most 6 times. If it doesn't pass the self-test, the airbag control module illuminates the indicator.	
Type 2	Type 2 indicates component installation fault. An airbag component fault and a circuit connection fault are detected. The indicator blinks for many times and then stays permanently illuminated. In this fault condition, the intact route way could still be ignited and the system will record the relevant faults.	
Type 3	Type 3 indicates an internal fault of the controller. In the case of an internal fault of the airbag control module, the airbag indicator will be on constantly.	



▲ WARNING: Internal malfunction of the controller is not repairable by ordinary service personnel and the only solution in this case is to replace SDM.

Diagnostic Trouble Code (DTC) List

Code	Code Fault Description	Fault type
B1000	ECU internal fault	3
B1001	Configuration fault	2
B0077	•Driver side peripheral acceleration sensor performance fault	2
B0079	Wrong connection or initialization fault of the driver side peripheral acceleration sensor	2
B0080	Defect or signal reliability fault of the driver side peripheral acceleration sensor	2

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	-December side peripheral constantion conser perfer	
B0078	 Passenger side peripheral acceleration sensor performance fault 	2
B0081	•Wrong connection or initialization fault of the passenger side peripheral acceleration sensor	2
B0082	Defect or signal reliability fault of the passenger side peripheral acceleration sensor	
B0026	Driver airbag open circuit	2
B0022	Driver airbag resistance too low	2
B0024	Driver airbag short circuit to ground or ground	2
B0025	Driver airbag short circuit to power supply	2
B0017	Passenger airbag open circuit	2
B0016	Passenger airbag resistance too low	2
B0018	Passenger airbag short circuit to ground or ground	2
B0019	Passenger airbag short circuit to power supply	2
B0065	Driver seat belt pretensioner open circuit	2
B0064	Driver seat belt pretensioner	2
B0066	•Driver seat belt pretensioner short circuit to ground or bonding	2
B0067	•Driver seat belt pretensioner short circuit to power	2
B0058	Passenger seat belt pretensioner open circuit	2
B0057	Passenger seat belt pretensioner resistance too low	2
B0059	•Passenger seat belt pretensioner short circuit to ground or bonding	
B0060	Passenger seat belt pretensioner short circuit to power	2
B0041	Driver airbag open circuit	2
B0040	Driver airbag resistance too low	2
B0045	Driver airbag short circuit to ground or ground	2
B0046	Driver airbag short circuit to power supply	2
B0029	Passenger curtain airbag open circuit	
B0028	Passenger airbag resistance too low	2
B0030	Passenger airbag short circuit to ground or ground	2
B0032	Passenger airbag short circuit to power	2
B1022	•Driver air curtain open circuit (reserved)	2
B1023	•Driver air curtain resistance too low (reserved)	2

Code	Code Fault Description	Fault type
B1024	Driver air curtain short circuit to ground or ground (reserved)	2
B1025	Driver air curtain short circuit to power (reserved)	3
B1027	Passenger air curtain open circuit (reserved)	3
B1028	Passenger air curtain resistance too low	2
B1029	Passenger air curtain short circuit to ground or ground (reserved)	2
B102A	Passenger air curtain short circuit to power (reserved)	2
B1328	•Too high power supply voltage	1
B1327	•Too low power supply voltage	1
B0671	System fault lamp short circuit to ground or open circuit	2
B0673	System fault lamp short circuit to power supply	2
B0051	Front airbag and front seat belt pretensioner ignited	3
B0034	Side airbag ignited	3
B0052	Airbag controller reaches the max limit and can't be used any more.	3
B0049	•Impact output short circuit to power supply	2
B0048	•Impact output short circuit to ground or open circuit	2
		9C,

Data Stream List

Read ECU Setting

Data Flow Item	Ignition Switch ON
Configuration - driver front airbag existence	Yes
Configuration - passenger front airbag existence	Yes
Configuration - driver seat belt pretensioner existence	Yes
Configuration - passenger seat belt pretensioner existence	Yes
Configuration - driver curtain airbag existence	Yes
Configuration - passenger curtain airbag existence	Yes
Configuration - driver side peripheral acceleration sensor existence	Yes
Configuration - passenger side peripheral acceleration sensor existence	Yes
Configuration - fault lamp	Yes
Configuration - collision output	Yes
Actual configuration - driver front airbag existence	Yes
Actual configuration - passenger front airbag existence	Yes
Actual configuration - driver seat belt pretentioner existence	Yes
Actual configuration - passenger seat belt pretentioner existence	Yes
Actual configuration - driver side airbag existence	Yes
Actual configuration - passenger curtain airbag existence	Yes
Actual configuration - driver side peripheral acceleration sensor existence	Yes
Actual configuration - passenger side peripheral acceleration sensor existence	Yes
Actual configuration - fault lamp	Yes
Actual configuration - collision output	Yes
Wrong configuration - driver front airbag existence	No
Wrong configuration - passenger front airbag existence	No
Wrong configuration - driver seat belt pretentioner existence	No
Wrong configuration - passenger seat belt pretentioner existence	No
Wrong configuration - driver curtain airbag existence	No
Wrong configuration - passenger curtain airbag existence	No
Wrong configuration - driver side peripheral acceleration sensor existence	No
Wrong configuration - passenger side peripheral acceleration sensor existence	No
Wrong configuration - fault lamp	No
Wrong configuration - collision output	No

Read Controller Information

Data Flow Item	Ignition Switch "ON"
User part No.	003414070-W01
Number SW (Number BB)	CNU
Current fault makes the fault lamp on	No
Historical fault makes the fault lamp on	No
Customer production mode makes the fault lamp on	No
Ignited airbag makes the fault lamp on	No
Diagnostic communication makes the fault lamp on	Yes
Algorithm failure makes the fault lamp on	No
Ignition circuit failure makes the fault lamp on	No
Accident counter	0
Diagnostic tool is used to close the passenger front airbag	No
Manually close the passenger front airbag	No
Bosch development mode	No
Customer development mode	No
Customer production mode	No
Customer after-sales mode	Yes
Pre-ignited mode	Yes
Post-ignited mode	No
	No No

Read Controller Product Information

Data Flow Item	Ignition Switch ON
Bosch production date	June 28, 2012
EEPROM version	132900
Bosch part number code	KJ095
Product serial number	80001113
Customer project code	02D9
Current operating time count	421512
On-off count	690
Bosch software number	01

DTC Diagnosis Procedure Index

Fault Code	Description	Diagnosis Procedures	
B0065	Driver seat belt pretensioner open circuit	Refer to: DTC B0064, B0065,	
B0064	Driver seat belt pretensioner	B0066, B0067	
B0066	•Driver seat belt pretensioner short circuit to ground or ground		
B0067	•Driver seat belt pretensioner short circuit to power supply		
B0026	Driver airbag open circuit	Refer to: DTC B0026, B0022,	
B0022	Driver airbag resistance too low	B0024, B0025	
B0024	Driver airbag short circuit to ground or ground		
B0025	Driver airbag short circuit to power supply		
B1328	Too high power supply voltage	Refer to: DTC B1328, B1327	
B1327	Too low power supply voltage		
B0017	Passenger airbag open circuit	Refer to: DTC B0016, B0017, B0018, B0019	
B0016	Passenger airbag resistance too low		
B0018	Passenger airbag short circuit to ground or ground		
B0019	Passenger airbag short circuit to power supply		
B0058	Passenger seat belt pretensioner open circuit	Refer to: DTC B0057, B0058,	
B0057	Passenger seat belt pretensioner resistance too low	B0059, B0060	
B0059	Passenger seat belt pretensioner short circuit to ground or ground	, CC	
B0060	Passenger seat belt pretensioner short circuit to power supply		
B0671	System fault lamp short circuit to ground or open circuit	Refer to: DTC B0671, B0673	
B0673	System fault lamp short circuit to power supply		
B1000	•ECU internal fault	Refer to: DTC B1000, B1001	
B1001	Configuration fault		

Supplemental Restraint System

Fault Code	Description	Diagnosis Procedures
B0077	•Driver side peripheral acceleration sensor performance fault	
B0079	•Wrong connection or initialization fault of the driver side peripheral acceleration sensor	
B0080	•Defect or signal reliability fault of the driver side peripheral acceleration sensor	Replace the sensor. Refer to: Impact Sensor (4.2.1
B0078	Passenger side peripheral acceleration sensor performance fault	Supplemental Restraint System, Removal and Installation).
B0081	•Wrong connection or initialization fault of the passenger side peripheral acceleration sensor	
B0082	Defect or signal reliability fault of the passenger side peripheral acceleration sensor	
B0041	Driver airbag open circuit	Refer to: DTC B0041, B0040,
B0040	Driver airbag resistance too low	B0045, B0046
B0045	Driver airbag short circuit to ground or bonding	
B0046	Driver airbag short circuit to power supply	
B0029	Passenger airbag open circuit	Refer to: DTC B0028, B0029,
B0028	Passenger airbag resistance too low	B0030, B0032
B0030	Passenger airbag short circuit to ground or ground	
B0032	Passenger airbag short circuit to power supply	0/
B0049	•Impact output short circuit to power supply	Refer to: DTC B0049, B0048
B0048	•Impact output short circuit to ground or open circuit	'C'C'
B0051	•Front airbag and front seat belt pretensioner ignited	Refer to: DTC B0051, B0034, B0052
B0034	Side airbag ignited	
B0052	•The airbag controller reaches the max limit and can't be used any more	

DTC B0064, B0065, B0066, B0067



▲ WARNING: Disconnect the battery negative cable for more than 60 seconds before the operation on the airbag.

1. Fault Code Description

Fault Code	Description	Definition
B0065	•Driver seat belt pretensioner open circuit	•The system detects the driver seat belt pre- tensioner open circuit
B0064	Driver seat belt pretensioner	•The system detects the driver seat belt pre- tensioner
B0066	•Driver seat belt pretensioner short circuit to ground or ground	•The system detects the driver seat belt pre- tensioner short circuit to ground or bonding
B0067	•Driver seat belt pretensioner short circuit to power supply	•The system detects the driver seat belt pre- tensioner short circuit to power supply

2. Possible Sources

Fault Code	Test Tactics	Equippment Conditions (Control Tactics)	Fault Component
B0065		120	•Wiring harness
B0064	Hardware circuit	Carry out the self-test. A hardware	•Driver side pretensioner
B0066	inspection	circuit fault is detected.	seat belt
B0067		160	Airbag control module
			c/6C'

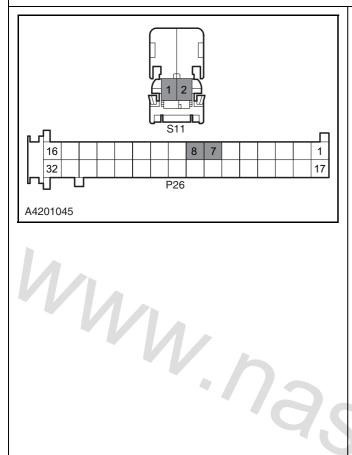
3. Diagnosis Procedures

Test Conditions	Details/Results/Solutions	
1. Inspect the trouble code		
	A.Connect the Changan special diagnostic tool and diagnose supplemental restraint system.	
	B.Read and clear the historical DTC.	
	C.Frequently turn on the ignition switch to perform the airbag self-test.	
	D.Read DTC again.	
	Are there any other DTCs except for B0064, B0065, B0066 and B0067?	
	Y	
	Repair according to the instruction of DTCs.	
1/1.	Refer to: DTC Diagnosis Procedure Index (4.2.1 Supplemental Restraint System, DTC Diagnosis and Testing).	
WIA	N	
V///	Go to step 2.	
2. Inspect the driver seat belt pretensioner wirin	ng harness connector	
.//2~	A.Inspect the driver seat belt pretensioner wiring harness connector for correct connection.	
	Is the connection of the wiring harness connector normal?	
	Y	
	Go to step 3.	
	N	
2. In an and the grishest control as a dula wising however	Reconnect the wiring harness connector correctly.	
Inspect the airbag control module wiring harn		
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative wiring harness for at least 60 s.	
	B.Inspect the wiring harness connector of the airbag control module and clean it.	
	Is the system normal?	
	Y	
	Confirm the maintenance is finished.	
	N	
	Go to step 4.	

Test Conditions

Details/Results/Solutions

4. Inspect the driver seat belt pretensioner circuit



- A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative wiring harness for at least 60 s.
- B.Disconnect the wiring harness connector P26 of the airbag control module.
- C.Disconnect the driver seat belt pretensioner wiring harness connector S11.
- D.Measure the resistance value (check for open circuit) between the terminal 7 of the wiring harness connector P26 and the terminal 1 of the wiring harness connector S11, and the resistance between the terminal 8 of wiring harness connector P26 and the terminal 2 of wiring harness connector S11.

Standard Resistance Value: less than 1 Ω

E.Measure the resistance value (check for short circuit) between the terminal 7 and the terminal 8 of the wiring harness connector P26.

Standard Resistance Value: 10 MΩ or more

F.Measure the resistance value (check the vehicle body ground for short circuit) between the terminal 7 of the wiring harness connector P26 and the reliable ground, and the resistance between the terminal 8 of wiring harness connector P26 and the reliable ground.

Standard Resistance Value: 10 MΩ or more

- G.Disconnect the battery negative cable and wait for a moment.
- H.Turn the ignition switch to "ON" position.
- I.Measure the voltage (check for short circuit to power) between the terminal 7 of the wiring harness connector P26 and the reliable ground, and the voltage between the terminal 8 of wiring harness connector P26 and the reliable ground.

Standard Voltage Value: 0 V

Is the circuit normal?

Υ

Go to step 5.

Ν

Replace the airbag wiring harness with fault.

Test Conditions	Details/Results/Solutions
5. Replace the driver seat belt pretensioner	
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
	B.Replace the driver seat belt pretensioner.
	Refer to: Front Seat Belt (5.1.4 Seat Belt System, Removal and Installation).
	C.Disconnect the battery negative cable and wait for a moment.
	D.Turn the ignition switch to "ON" position.
	E.Connect the diagnostic tool and clear the historical DTCs.
	F.Read the DTC again.
	Is the system normal?
1	Y
	Confirm the maintenance is finished.
VV_{1}	N
~ V I/I /	Replace the airbag control module.
MW. 72.5	Refer to: Airbag Control Module (4.2.1 supplemental Restraint System, Removal and Installation).
,6,0	Verify the system is normal.
	1COe/ec.//

DTC B0026, B0022, B0024, B0025



WARNING: Disconnect the battery negative cable for more than 60 s before the operation on the airbag to ensure the safety.

1. Fault Code Description

Fault Code	Description	Definition
B0026	Driver airbag open circuit	•The system detects the driver airbag open circuit
B0022	•Driver airbag resistance too low	•The system detects the driver airbag resistance is too low
B0024	•Driver airbag short circuit to ground or bonding	•The system detects the driver curtain airbag short circuit to ground or ground
B0025	•Driver airbag short circuit to power supply	•The system detects the driver airbag short circuit to power supply

2. Possible Sources

Fault Code	Test Tactics	Equipment Conditions (Control Tactics)	Fault Component
B0026	4		Wiring harness
B0022	Hardware circuit	Hardware circuit fault detected	•Clock spring
B0024	inspection		Driver airbag
B0025			Airbag control module

3. Diagnosis Procedures

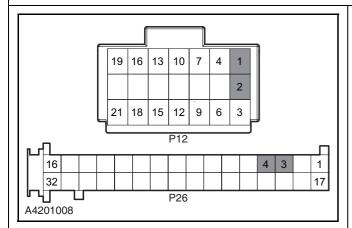
Test Conditions	Details/Results/Solutions	
1. Inspect the trouble code	uble code	
	A.Connect the Changan special diagnostic tool and diagnose the supplemental restraint system.	
	B.Read and clear the historical DTC.	
	C.Start the motor and run it for 5 min. Meanwhile turn the steering wheel all the way to the left and right several times.	
	D.Read the DTC again.	
	Are there any other DTCs except for B0026, B0022, B0024 and B0025?	
	Υ	
	Repair according to the instruction of DTCs.	
	Refer to: DTC Diagnosis Procedure Index	
	(4.2.1 Supplemental Restraint System, DTC Diagnosis and Testing).	
	N	
	Go to step 2.	

Test Conditions	Details/Results/Solutions	
2. Inspect the wiring harness connector of the clock spring		
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.	
	B.Inspect the wiring harness connector of the clock spring and clean it.	
	Is the system normal? Y	
	Confirm the maintenance is finished.	
	N	
	Go to step 3.	
3. Inspect the clock spring resistance	1	
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.	
MM. 725/	B.Disconnect the clock spring wiring harness as well as the connection between the clock spring and the driver airbag.	
	C.Inspect the exterior of the clock spring. Deformation, breakage and melting traces are not allowed.	
	D.Inspect the clock spring resistance.	
1//2	Standard Resistance Value: less than 1 Ω	
'98	Is the resistance value of the clock spring normal?	
	Go to step 4.	
	N	
	Replace the clock spring.	
	Refer to: Clock Spring (4.2.1 Supplemental Restraint System, Removal and Installation).	
4. Inspect the wiring harness connector of the airbag control module		
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.	
	B.Inspect the wiring harness connector of the airbag control module and clean it.	
	Is the system normal?	
	Υ	
	Confirm the maintenance is finished.	
	N	
	Go to step 5.	

Test Conditions

Details/Results/Solutions

5. Inspect the circuit between the airbag control module and the clock spring



Mw.na

- A.Turn the ignition switch to position "LOCK" and disconnect the battery negative cable for at least 60 s.
- B.Disconnect the wiring harness connector P26 of the airbag control module.
- C.Disconnect the clock spring wiring harness connector P10.
- D.Measure the resistance value between the terminal 4 of the wiring harness connector P26 and the terminal 2 of the clock spring wiring harness connector P12, and the resistance between the terminal 3 of the wiring harness connector P26 and the terminal 1 of P12, and check for open circuit.

Standard Resistance Value: less than 1 Ω

E.Measure the resistance value between the terminals 4 and the terminal 3 of the wiring harness connector P26 (check for short circuit).

Standard Resistance Value: 10 MΩ or more

F.Measure the resistance value (check the vehicle body ground for short circuit) between the terminal 4 of the wiring harness connector P26 and the reliable ground, and the resistance between the terminal 3 of wiring harness P26 and the reliable ground.

Standard Resistance Value: 10 MΩ or more

- G.Disconnect the battery negative cable and wait for a moment.
- H.Turn the ignition switch to "ON" position.
- I.Measure the voltage (check for short circuit to power supply) between the terminal 4 of the wiring harness connector P26 and the reliable ground, and the voltage between the terminal 3 of wiring harness connector P26 and the reliable ground.



WARNING: Do not measure the resistance value of the airbag inflation module with a multimeter. A special diagnostic tool shall be used for malfunction detection.

Standard Voltage Value: 0 V

Is the circuit normal?

Υ

Go to step 6.

N

Replace the wiring harness.

Test Conditions	Details/Results/Solutions
6. Replace the driver airbag	
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
	B.Replace the driver airbag.
	Refer to: Driver Airbag and Steering Wheel (4.2.1 Supplemental Restraint System, Removal and Installation).
	Is the system normal?
	Υ
	The system is normal.
	N
	Go to step 7.
7. Replace the airbag control module	
VIA.	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
	B.Replace the airbag control module.
/// ₁ / ₂ / ₂ / ₂	Refer to: Airbag Control Module (4.2.1 Supplemental Restraint System, Removal and Installation).
, (6,0	Confirm the maintenance is finished.
	COe/ec.//

DTC B1328, B1327



WARNING: Disconnect the battery negative cable for more than 60 seconds before the operation on the airbag to ensure the safety.

1. Fault Code Description

Fault Code	Description	Definition
B1328	•Too high power supply voltage	•Carry out the self-test for six times. The power supply voltage is greater than 17.25 V.
B1327	•Too low power supply voltage	•Carry out the self-test for six times. The power supply voltage is less than 8.25 V.

2. Possible Sources

Fault Code	Test Tactics	Equipment Conditions (Control Tactics)	Fault Component
B1328	Hardware circuit	Carry out the self-test. A hardware cir-	Wiring harness
B1327	inspection	cuit fault is detected.	Charging system

3. Diagnosis Procedures

Test Conditions	Details/Results/Solutions
Inspect the trouble code	
	A.Connect the Changan special diagnostic tool and diagnose the supplemental restraint system.
	B.Read and clear the historical DTC.
	C.Start the motor and run it for 5 min. Meanwhile turn the steering wheel all the way to the left and right several times.
	D.Read the DTC again.
	Are there any other DTCs except for the B1328 and B1327?
	Y
	Repair according to the instruction of DTCs.
	Refer to: DTC Diagnosis Procedure Index (4.2.1 Supplemental Restraint System, DTC Diagnosis and Testing).
	N
	Go to step 2.

Test Conditions	Details/Results/Solutions
2. Inspect the battery voltage	
	A.Turn the ignition switch to position "ON", inspect the battery voltage with the multimeter.
	Standard Voltage Value: 11 ~ 14 V
	B.Start the engine, inspect the battery voltage with the multimeter.
	Standard Voltage Value: 11 ~ 16 V
	Is the battery voltage normal?
	Υ
	Go to step 3.
	N
	Inspect and repair the charging system.
	Refer to: Battery Undercharge Diagnosis, Battery Overcharge Diagnosis (3.1.10 Charging System, Symptom Diagnosis and Testing).
3. Inspect the wiring harness connector of the airba	<u> </u>
7725	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
	B.Inspect the wiring harness connector of the airbag control module and clean it.
	Is the system normal?
	Υ
	Confirm the maintenance is finished.
	N
	Go to step 4.
4. Inspect the airbag control module power supply circuit	
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
	B.Inspect the airbag control module power supply wiring harness. Replace the airbag wiring harness with fault.
	Verify the system is normal.

DTC B0017, B0016, B0018, B0019



▲ WARNING: Disconnect the battery negative cable for more than 60 seconds before the operation on the airbag to ensure the safety.

1. Fault Code Description

Fault Code	Description	Definition
B0017	Passenger airbag open circuit	•The system detects the passenger airbag open circuit
B0016	Passenger airbag resistance too low	•The system detects the passenger airbag resistance less than 1.1 $\boldsymbol{\Omega}$
B0018	Passenger airbag short cir- cuit to ground or ground	•The system detects the passenger airbag short circuit to ground or ground
B0019	Passenger airbag short cir- cuit to power supply	•The system detects the passenger airbag short circuit to power supply

2. Possible Sources

VI/I \sim

Fault Code	Test Tactics	Equipment Conditions (Control Tactics)	Fault Component
B0017			Wiring harness
B0016	Hardware circuit	Hardware circuit fault detected	Passenger airbag
B0018	inspection	Traidware circuit fauit detected	
B0019			Airbag control module

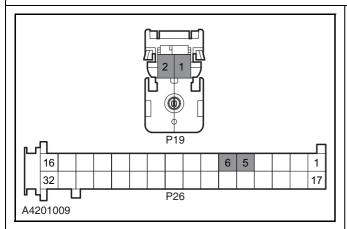
Test Conditions	Details/Results/Solutions	
1. Inspect the trouble code		
	A.Connect the Changan special diagnostic tool and diagnose the supplemental restraint system.	
	B.Read and clear the historical DTC.	
	C.Start the motor and run it for 5 min. Meanwhile turn the steering wheel all the way to the left and right several times.	
	D.Read the DTC again.	
	Are there any other DTCs except for B0017, B0016, B0018 and B0019?	
	Y	
	Repair according to the instruction of DTCs.	
	Refer to: DTC Diagnosis Procedure Index (4.2.1 Supplemental Restraint System, DTC Diagnosis and Testing).	
	N	
	Go to step 2.	

Test Conditions	Details/Results/Solutions
2. Inspect the wiring harness connector of pas	ssenger airbag
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
	B.Inspect the wiring harness connector of the passenger airbag and clean it.
	Is the system normal?
	Y
	Confirm the maintenance is finished.
	N
	Go to step 3.
3. Inspect the wiring harness connector of the	e airbag control module
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
/1 .	B.Inspect the wiring harness connector of the airbag control module and clean it.
	Is the system normal?
VIA.	Υ
	Confirm the maintenance is finished.
	N
1//2	Go to step 4.
)/Coe/ec.//

Test Conditions

Details/Results/Solutions

4. Inspect the circuit between the airbag control module and the passenger airbag



Mw.na

- A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
- B.Disconnect the wiring harness connector P26 of the airbag control module.
- C.Disconnect the passenger airbag wiring harness connector P19.
- D.Measure the resistance value between the terminal 6 of the wiring harness connector P26 and the terminal 1 of the wiring harness connector P19, and the resistance between the terminal 5 of P26 and the terminal 2 of P19, and check for open circuit.

Standard Resistance Value: less than 1 Ω

E.Measure the resistance value (check for short circuit) between the terminal 6 and the terminal 5 of the wiring harness connector P26.

Standard Resistance Value: 10 MΩ or more

F.Measure the resistance value (check the vehicle body ground for short circuit) between the terminal 6 of the wiring harness connector P26 and the reliable ground, and the resistance between the terminal 5 of wiring harness connector P26 and the reliable ground.

Standard Resistance Value: 10 MΩ or more

- G.Disconnect the battery negative cable and wait for a moment.
- H.Turn the ignition switch to "ON" position.
- I.Measure the voltage (check for short circuit to power) between the terminal 6 of the wiring harness connector P26 and the reliable ground, and the voltage between the terminal 5 of wiring harness connector P26 and the reliable ground.



WARNING: Do not measure the resistance value of the airbag inflation module with a multimeter. A special diagnostic tool shall be used for malfunction detection.

Standard Voltage Value: 0 V

Is the circuit normal?

Υ

Go to step 5.

N

Replace the airbag wiring harness with fault.

Test Conditions	Details/Results/Solutions
5. Replace the passenger airbag	
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
	B.Replace the passenger airbag.
	Refer to: Passenger Airbag (4.2.1 Supplemental Restraint System, Removal and Installation).
	Is the system normal?
	Υ
	The system is normal.
	N
	Go to step 6.
6. Replace the airbag control module	
///	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
VVIA.	B.Replace the airbag control module.
//w, //as	Refer to: Airbag Control Module (4.2.1 Supplemental Restraint System, Removal and Installation).
'(C)(Confirm the maintenance is finished.
	P/Coe/ec.//

DTC B0057, B0058, B0059, B0060



▲ WARNING: Disconnect the battery negative cable for more than 60 seconds before the operation on the airbag.

1. Fault Code Description

Fault Code	Description	Description Definition	
B0058	Passenger seat belt pretensioner open circuit	•The system detects the passenger seat belt pr tensioner open circuit	
B0057	Passenger seat belt pretensioner resistance too low	•The system detects the passenger seat belt pretensioner resistance less than 1.1 Ω .	
B0059	Passenger seat belt pretensioner short circuit to ground or ground	•The system detects the passenger seat belt pre- tensioner short circuit to ground or ground	
B0060	Passenger seat belt pretensioner short circuit to power	•The system detects the passenger seat belt pre- tensioner short circuit to power supply	

2. Possible Sources

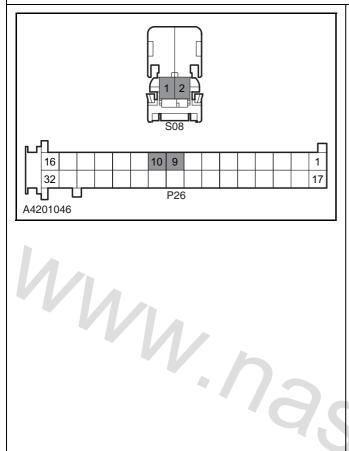
Fault Code	Test Tactics	Equipment Conditions (Control Tactics)	Fault Component
B0058		180:	Wiring harness
B0057	Hardware circuit	Carry out the self-test. A hardware cir-	•Pretensioner seat belt at
B0059	inspection	cuit fault is detected.	passenger's side
B0060		, (()	Airbag control module
			c/ec./

Test Conditions	Details/Results/Solutions
1. Inspect the trouble code	
	A.Connect the Changan special diagnostic tool and diagnose the supplemental restraint system.
	B.Read and clear the historical DTC.
	C.Frequently turn on the ignition switch to perform the airbag self-test.
	D.Read the DTC again
	Are there any other DTCs except for B0057, B0058, B0059 and B0060?
	Y
	Repair according to the instruction of DTCs.
1/1.	Refer to: DTC Diagnosis Procedure Index (4.2.1 Supplemental Restraint System, DTC Diagnosis and Testing).
WIA.	N
"V I/1,	Go to step 2.
2. Inspect the passenger seat belt pretensione	er wiring harness connector
1//2	A.Inspect the passenger seat belt pretensioner wiring harness connector for correct connection.
, 4,5	Is the connection of the wiring harness connector normal?
	Y
	Go to step 3.
	N
	Reconnect the wiring harness connector correctly.
3. Inspect the wiring harness connector of the airbag control module	
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
	B.Inspect the wiring harness connector of the airbag control module and clean it.
	Is the system normal?
	Y
	Confirm the maintenance is finished.
	N
	Go to step 4.

Test Conditions

Details/Results/Solutions

4. Inspect the circuit between the airbag control module and the passenger seat belt pretensioner



- A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
- B.Disconnect the wiring harness connector P26 of the airbag control module.
- C.Disconnect the passenger seat belt pretensioner wiring harness connector S08.
- D.Measure the resistance value between the terminal 9 of the wiring harness connector P26 and the terminal 2 of the wiring harness connector S08, and the resistance between the terminal 10 of wiring harness connector P26 and the terminal 1 of S08, and check for open circuit.

Standard Resistance Value: less than 1 Ω

E.Measure the resistance value (check for short circuit) between the terminal 9 and the terminal 10 of the wiring harness connector P26.

Standard Resistance Value: 10 $M\Omega$ or more

F.Measure the resistance value (check the vehicle body ground for short circuit) between the terminal 9 of the wiring harness connector P26 and the reliable ground, and the resistance between the terminal 10 of wiring harness connector P26 and the reliable ground.

Standard Resistance Value: 10 MΩ or more

- G.Disconnect the battery negative cable and wait for a moment.
- H.Turn the ignition switch to "ON" position.
- I.Measure the voltage (check for short circuit to power supply) between the terminal 9 of the wiring harness connector P26 and the reliable ground, between the terminal 10 of wiring harness connector P26 and the reliable ground.

Standard Voltage Value: 0 V

Is the circuit normal?

Υ

Go to step 5.

N

Replace the airbag wiring harness with fault.

Test Conditions	Details/Results/Solutions
5. Replace the passenger seat belt pretensioner	
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
	B.Replace the passenger seat belt pretensioner.
	Refer to: Front Seat Belt (5.1.4 Seat Belt System, Removal and Installation).
	C.Disconnect the battery negative cable and wait for a moment.
	D.Turn the ignition switch to "ON" position.
	E.Connect the diagnostic tool and clear the historical DTCs.
	F.Read the DTC again.
	Is the system normal?
	Y
	Confirm the maintenance is finished.
	N
~ V I / / .	Replace the airbag control module.
/W. 72.0	Refer to: Airbag Control Module (4.2.1 supplemental Restraint System, Removal and Installation).
, 4,0	Verify the system is normal.
	CO6/6C'/

DTC B0671, B0673



▲ WARNING: Disconnect the battery negative cable for more than 60 seconds before the operation on the airbag.

1. Fault Code Description

Fault Code	Description	Definition
B0671	System fault lamp short circuit to ground or open circuit	•SDM internal algorithm parameter lack or error
B0673	•System fault lamp short circuit to power supply	Output circuit fault

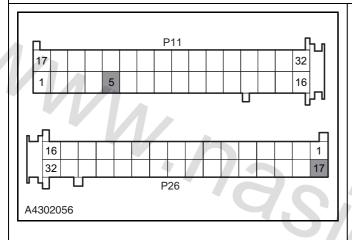
2. Possible Sources

Fault Code	Test Tactics	Equipment Conditions (Control Tactics)	Fault Component
B0671	Control module hard-	Llardware circuit foult detected	Wiring harness
B0673	ware inspection	Hardware circuit fault detected	•SDM

Test Conditions	Details/Results/Solutions
Inspect the trouble code	0/0
	A.Connect the Changan special diagnostic tool and diagnose the supplemental restraint system.
	B.Read and clear the historical DTC.
	C.Start the motor and run it for 5 min. Meanwhile turn the steering wheel all the way to the left and right several times.
	D.Read the DTC again.
	Is there any other DTCs except for the B0671 and B0673?
	Υ
	Repair according to the instruction of DTCs.
	Refer to: DTC Diagnosis Procedure Index (4.2.1 Supplemental Restraint System, DTC Diagnosis and Testing).
	N
	Go to step 2.

Test Conditions 2. Inspect the wiring harness connector of the airbag control module A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s. B.Inspect the wiring harness connector of the passenger airbag and clean it. Is the system normal? Y Confirm the maintenance is finished. N Go to step 3.

3. Inspect the circuit between the airbag control module and the Instrument



- A.Turn the ignition switch to position "LOCK" and disconnect the battery negative cable.
- B.Disconnect the Instrument wiring harness connector P11.
- C.Disconnect the wiring harness connector P26 of the airbag control module.
- D.Measure the resistance between the terminal 5 of the Instrument wiring harness connector P11 and the reliable ground.

Standard Resistance Value: 10 $M\Omega$ or more

E.Measure the voltage between the terminal 5 of the Instrument wiring harness connector P11 and the reliable ground.

Standard Voltage Value: 0 V

F.Measure the resistance value between the terminal 5 of the Instrument wiring harness connector P11 and the terminal 17 of the airbag control module wiring harness connector P26. Inspect the circuit for open circuit.

Standard Resistance Value: less than 5 Ω

Is the resistance value normal?

Υ

Go to step 4.

N

Inspect and repair the open or short circuit fault between the terminal 5 of the Instrument wiring harness connector P11 and the terminal 17 of the airbag control module wiring harness connector P26.

Test Conditions	Details/Results/Solutions
4. Replace the airbag control module	
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
	B.Replace the airbag control module.
	Refer to: Airbag Control Module (4.2.1 supplemental Restraint System, Removal and Installation).
	Verify the system is normal.



DTC B1000, B1001



WARNING: Disconnect the battery negative cable for more than 60 seconds before the operation on the airbag to ensure the safety.

1. Fault Code Description

Fault Code	Description	Definition
B1000	•ECU internal fault	•Error or lack of SDM internal algorithm
D4004	0 5 11 5 11	parameter
B1001	Configuration fault	Collision recorded

2. Possible Sources

Fault Code	Test Tactics	Equipment Conditions (Control Tactics)	Fault Component
B1000	Control module hard-	Carry out the system self-test. A module hardware fault is detected.	• SDM
B1001	ware inspection	Carry out the system self-test. A collision record is detected.	SDIVI

Test Conditions	Details/Results/Solutions
Inspect the trouble code	
	A.Connect the Changan special diagnostic tool and diagnose the supplemental restraint system.
	B.Read and clear the historical DTC.
	C.Start the motor and run it for 5 min. Meanwhile turn the steering wheel all the way to the left and right several times.
	D.Read the DTC again.
	Is there any other DTC except for B1000 and B1001?
	Y
	Repair according to the instruction of DTCs.
	Refer to: DTC Diagnosis Procedure Index (4.2.1 Supplemental Restraint System, DTC Diagnosis and Testing).
	N
	Go to step 2.

Test Conditions	Details/Results/Solutions	
2. Inspect the wiring harness connector of the airbag control module		
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.	
	B.Inspect the wiring harness connector of the airbag control module and clean it.	
	Is the system normal?	
	Υ	
	Confirm the maintenance is finished.	
	N	
	Go to step 3.	
3. Replace the airbag control module		
1.	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.	
	B.Replace the airbag control module.	
WW.D.	Refer to: Airbag Control Module (4.2.1 Supplemental Restraint System, Removal and Installation).	
	Verify the system is normal.	
)/COe/ec/	

DTC B0041, B0040, B0045, B0046



WARNING: Disconnect the battery negative cable for more than 60 seconds before the operation on the airbag to ensure the safety.

1. Fault Code Description

Fault Code	Description	Definition
B0041	Driver airbag open circuit	System detects driver airbag open circuit
B0040	•Driver airbag resistance low	•The system detects the driver curtain airbag resistance less than 1.1 $\boldsymbol{\Omega}$
B0045	Driver airbag short circuit to ground or bonding	•The system detects the driver airbag short circuit to ground or ground
B0046	Driver airbag short circuit to power supply	•The system detects the driver airbag short circuit to power supply

2. Possible Sources

Fault Code	Test Tactics	Equipment Conditions (Control Tactics)	Fault Component
B0041	1 / h		
B0040	Hardware circuit	Hardware circuit fault detected	Wiring harness
B0045	inspection	nardware circuit fault detected	•Side airbag at driver's side
B0046		70/0	

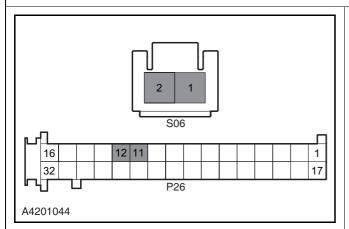
Test Conditions	Details/Results/Solutions
1. Inspect the trouble code	
	A.Connect the Changan special diagnostic tool and diagnose the supplemental restraint system.
	B.Read and clear the historical DTC.
	C.Start the motor and run it for 5 min. Meanwhile tur the steering wheel all the way to the left and right several times.
	D.Read the DTC again.
	Is there any other DTC except for B0041, B0040, B0045 and B0046?
	Y
	Repair according to the instruction of DTCs.
	Refer to: DTC Diagnosis Procedure Inde (4.2.1 Supplemental Restraint System DTC Diagnosis and Testing).
	N
	Go to step 2.

Test Conditions	Details/Results/Solutions	
2. Inspect the wiring harness connector of the driver side airbag		
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.	
	B.Inspect the wiring harness connector of the passenger side airbag and clean it.	
	Is the system normal?	
	Υ	
	Confirm the maintenance is finished.	
	N	
	Go to step 3.	
3. Inspect the wiring harness connector of the airba	ag control module	
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.	
MW.73	B.Inspect the wiring harness connector of the airbag control module and clean it.	
VVIA.	Is the system normal?	
* VI/ .	Y	
1,0	Confirm the maintenance is finished.	
1//2	N	
(0)	Go to step 4.	
	P/Coe/ec.//	

Test Conditions

Details/Results/Solutions

4. Inspect the circuit between the airbag control module and the driver side airbag



- A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
- B.Disconnect the wiring harness connector P26 of the airbag control module.
- C.Disconnect the wiring harness connector S06 of the driver side airbag.
- D.Measure the resistance value between the terminal 11 of the wiring harness connector P26 and the terminal 1 of the wiring harness connector S06, and the resistance between the terminal 12 of P26 and the terminal 2 of wiring harness connector S06, and check for open circuit.

Standard Resistance Value: less than 1 Ω

E.Measure the resistance value (check for short circuit) between the terminal 11 and the terminal 12 of the wiring harness connector P26.

Standard Resistance Value: 10 MΩ or more

F.Measure the resistance value (check the vehicle body ground for short circuit) between the terminal 12 of the wiring harness connector P26 and the reliable ground, and the resistance between the terminal 11 of wiring harness connector P26 and the reliable ground.

Standard Resistance Value: 10 MΩ or more

- G.Disconnect the battery negative cable and wait for a moment.
- H.Turn the ignition switch to "ON" position.
- I.Measure the voltage (check for short circuit to power supply) between the terminal 12 of the wiring harness connector P26 and the reliable ground, and the voltage between the terminal 11 of wiring harness connector P26 and the reliable ground.



WARNING: Do not measure the resistance value of the airbag inflation module with a multimeter. A special diagnostic tool shall be used for malfunction detection.

Standard Voltage Value: 0 V

Is the circuit normal?

Υ

Go to step 5.

N

Replace the airbag wiring harness with fault.

Test Conditions	Details/Results/Solutions
5. Replace the driver side airbag	
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
	B.Replace the driver side airbag.
	Refer to: Side Airbag (4.2.1 Supplemental Restraint System, Removal and Installation).
	Verify the system is normal.



DTC B0028, B0029, B0030, B0032



WARNING: Disconnect the battery negative cable for more than 60 seconds before the operation on the airbag to ensure the safety.

1. Fault Code Description

Fault Code	Description	Definition
B0029	Passenger airbag open circuit	•The system detects the passenger airbag open circuit
B0028	Passenger airbag resistance too low	•The system detects the passenger airbag resistance less than 1.1 $\boldsymbol{\Omega}$
B0030	Passenger airbag short circuit to ground or ground	•The system detects the passenger airbag short circuit to ground or bonding
B0032	Passenger airbag short circuit to power supply	Passenger airbag short circuit to power supply

2. Possible Sources

Fault Code	Test Tactics	Equipment Conditions (Control Tactics)	Fault Component
B0029			
B0028	Hardware circuit inspection	Hardware circuit fault detected	Wiring harness
B0030		Traidware circuit fault detected	Passenger side airbag
B0032			

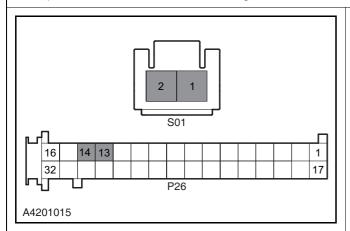
Test Conditions	Details/Results/Solutions	
1. Inspect the trouble code	ode	
	A.Connect the Changan special diagnostic tool and diagnose the supplemental restraint system.	
	B.Read and clear the historical DTC.	
	C.Start the motor and run it for 5 min. Meanwhile turn the steering wheel all the way to the left and right several times.	
	D.Read the DTC again.	
	Are there any other DTCs except for B0028, B0029, B0030 and B0032?	
	Y	
	Repair according to the instruction of DTCs.	
	Refer to: DTC Diagnosis Procedure Index (4.2.1 Supplemental Restraint System, DTC Diagnosis and Testing).	
	N	
	Go to step 2.	

Furn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s. Inspect the wiring harness connector of the passenger side airbag and clean it. Is the system normal? Y Confirm the maintenance is finished. N Go to step 3. module Furn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s. Inspect the wiring harness connector of the airbag control module and clean it. Is the system normal? Y Confirm the maintenance is finished.
disconnect the battery negative cable for at least 60 s. Inspect the wiring harness connector of the passenger side airbag and clean it. Is the system normal? Y Confirm the maintenance is finished. N Go to step 3. module Furn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s. Inspect the wiring harness connector of the airbag control module and clean it. Is the system normal? Y
passenger side airbag and clean it. Is the system normal? Y Confirm the maintenance is finished. N Go to step 3. module Furn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s. nspect the wiring harness connector of the airbag control module and clean it. Is the system normal? Y
Confirm the maintenance is finished. N Go to step 3. module Furn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s. nspect the wiring harness connector of the airbag control module and clean it. Is the system normal?
Confirm the maintenance is finished. N Go to step 3. module Furn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s. nspect the wiring harness connector of the airbag control module and clean it. Is the system normal?
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disconnect the battery negative cable for at least 60 s. nspect the wiring harness connector of the airbag control module and clean it. Is the system normal?
control module and clean it. Is the system normal? Y
Y
Confirm the maintenance is finished.
N
Go to step 4.
CO6/6C'!

Test Conditions

Details/Results/Solutions

4. Inspect the circuit between the airbag control module and the passenger side airbag



1/1/1/1/2S

- A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
- B.Disconnect the wiring harness connector P26 of the airbag control module.
- C.Disconnect the wiring harness connector S01 of the passenger side airbag.
- D.Measure the resistance value between the terminal 14 of the wiring harness connector P26 and the terminal 2 of the wiring harness connector S01, and the resistance between the terminal 13 of wiring harness connector P26 and the terminal 1 of wiring harness connector S01, and check for open circuit.

Standard Resistance Value: less than 1 Ω

E.Measure the resistance value (check for short circuit) between the terminal 13 and the terminal 14 of the wiring harness connector P26.

Standard Resistance Value: 10 MΩ or more

F.Measure the resistance value (check the vehicle body ground for short circuit) between the terminal 13 of the wiring harness connector P26 and the reliable ground, and the resistance between the terminal 14 of wiring harness connector P26 and the reliable ground.

Standard Resistance Value: 10 MΩ or more

- G.Disconnect the battery negative cable and wait for a moment.
- H.Turn the ignition switch to "ON" position.
- I.Measure the voltage (check for short circuit to power supply) between the terminal 13 of the wiring harness connector P26 and the reliable ground, between the terminal 14 of wiring harness connector P26 and the reliable ground.



WARNING: Do not measure the resistance value of the airbag inflation module with a multimeter. A special diagnostic tool shall be used for malfunction detection.

Standard Voltage Value: 0 V

Is the circuit normal?

Υ

Go to step 5.

Ν

Replace the airbag wiring harness with fault.

Test Conditions	Details/Results/Solutions
5. Replace the passenger side airbag	
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s. B.Replace the passenger side airbag.
	Refer to: Side Airbag (4.2.1 Supplemental Restraint System, Removal and Installation).
	Verify the system is normal.

DTC B0049, B0048

WARNING: Disconnect the battery negative cable for more than 60 seconds before the operation on the airbag to ensure the safety.

1. Fault Code Description

Fault Code	Description	Definition
B0049	•Impact output short circuit to power supply	•SDM internal algorithm parameter lack or error
B0048	•Impact output short circuit to ground or open circuit	Output circuit fault

2. Possible Sources

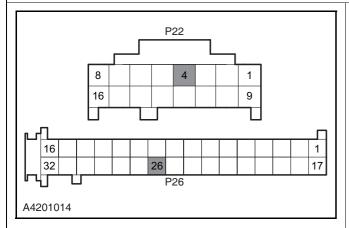
Fault Code	Test Tactics	Equipment Conditions (Control Tactics)	Fault Component
B0049	•Control module		
B0048	hardware inspection •Hardware circuit inspection	Hardware circuit fault detected	•Wiring harness •SDM

Test Conditions	Details/Results/Solutions	
1. Inspect the trouble code		
	A.Connect the Changan special diagnostic tool and diagnose the supplemental restraint system.	
	B.Read and clear the historical DTC.	
	C.Start the motor and run it for 5 min. Meanwhile turn the steering wheel all the way to the left and right several times.	
	D.Read the DTC again.	
	Are there any other DTCs except for the B0048 and B0049?	
	Υ	
	Repair according to the instruction of DTCs.	
MW.	Refer to: DTC Diagnosis Procedure Index (4.2.1 Supplemental Restraint System, DTC Diagnosis and Testing).	
	N	
	Go to step 2.	
2. Inspect the wiring harness connector of th	ne airbag impact output	
1/0	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.	
	B.Inspect the wiring harness connector of the airbag impact output and clean it.	
	Is the system normal?	
	Y	
	Confirm the maintenance is finished. N	
	Go to step 3.	
Inspect the wiring harness connector of the airbag control module		
-	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative for at least 60 s.	
	B.Inspect the wiring harness connector of the airbag control module and clean it.	
	Is the system normal?	
	Y	
	Confirm the maintenance is finished.	
	N	
	Go to step 4.	

Test Conditions

Details/Results/Solutions

4. Inspect the circuit between the airbag control module and BCM



Mw.na

- A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
- B.Disconnect the wiring harness connector P26 of the airbag control module.
- C.Disconnect the BCM wiring harness connector P22.
- D.Measure the resistance value between the terminal 26 of the wiring harness connector P26 and the terminal 4 of the wiring harness connector P22. Inspect for open circuit.

Standard Resistance Value: less than 1 Ω

E.Measure the resistance value (check for body short circuit to ground) between the terminal 26 of the wiring harness connector P26 and the reliable ground.

Standard Resistance Value: 10 $M\Omega$ or more

- F.Disconnect the battery negative cable and wait for a moment.
- G.Turn the ignition switch to "ON" position.
- H.Measure the voltage (check for short circuit to power supply) between the terminal 26 of the wiring harness connector P26 and the reliable ground.



WARNING: Do not measure the resistance value of the airbag inflation module with a multimeter. A special diagnostic tool shall be used for malfunction detection.

Standard Voltage Value: 0 V

Is the circuit normal?

Υ

Go to step 5.

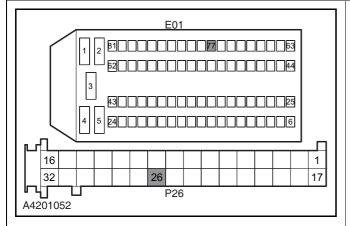
N

Replace the airbag wiring harness with fault.

Test Conditions

Details/Results/Solutions

5. Inspect the circuit between the airbag control module and ECM



MMAS

- A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
- B.Disconnect the wiring harness connector P26 of the airbag control module.
- C.Disconnect the ECM wiring harness connector E01.
- D.Measure the resistance value between the terminal 26 of the wiring harness connector P26 and the terminal 77 of the wiring harness connector E01. Inspect for open circuit.

Standard Resistance Value: less than 1 Ω

E.Measure the resistance value (check for body short circuit to ground) between the terminal 26 of the wiring harness connector P26 and the reliable ground.

Standard Resistance Value: 10 $M\Omega$ or more

- F.Disconnect the battery negative cable and wait for a moment.
- G.Turn the ignition switch to "ON" position.
- H.Measure the voltage (check for short circuit to power supply) between the terminal 26 of the wiring harness connector P26 and the reliable ground.



WARNING: Do not measure the resistance value of the airbag inflation module with a multimeter. A special diagnostic tool shall be used for malfunction detection.

Standard Voltage Value: 0 V

Is the circuit normal?

v

Go to step 6.

N

Replace the airbag wiring harness with fault.

Details/Results/Solutions
A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
B.Replace the airbag control module.
Refer to: Airbag Control Module (4.2.1 Supplemental Restraint System, Removal and Installation).
Is the system normal?
Y
Verify the system is normal.
N
Go to step 7.
j
A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.
B.Replace the engine control module.
A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s. B.Replace the engine control module. Refer to: Engine Control Module (3.1.13 Electronic Control System - ME7, Removal and Installation). Verify the system is normal.
Verify the system is normal.
CO6/6C*

DTC B0051, B0034, B0052



WARNING: Disconnect the battery negative cable for more than 60 seconds before the operation on the airbag to ensure the safety.

1. Fault Code Description

Fault Code	Description	Definition
B0051	•Front airbag and front seat belt pretensioner ignited	•The system detects that the front airbag and the front seat belt pretentioner are ignited
B0034	•Side airbag ignited	•The system detects the side airbag ignited
B0052	•The airbag controller reaches the max limit and can't be used any more	•The system detects that the airbag controller reaches the max limit and can't be used any more

2. Possible Sources

Fault Code	Test Tactics	Equipment Conditions (Control Tactics)	Fault Component
B0051			•Wiring harness
B0034	Hardware circuit inspection	Hardware circuit fault detected	
B0052			•SDM

Test Conditions	Details/Results/Solutions
Inspect the trouble code	
	A.Connect the Changan special diagnostic tool and diagnose the supplemental restraint system.
	B.Read and clear the historical DTC.
	C.Start the motor and run it for 5 min. Meanwhile turn the steering wheel all the way to the left and right several times.
	D.Read the DTC again.
	Is there any other DTC except for B0051, B0034 and B0052?
	Υ
	Repair according to the instruction of DTCs.
	Refer to: DTC Diagnosis Procedure Index (4.2.1 Supplemental Restraint System, DTC Diagnosis and Testing).
	N
	Go to step 2.

Supplemental Restraint System

Test Conditions	Details/Results/Solutions	
2. Inspect the wiring harness connector of the airbag control module		
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.	
	B.Inspect the wiring harness connector of the airbag control module and clean it.	
	Is the system normal?	
	Υ	
	Confirm the maintenance is finished.	
	N	
	Go to step 3.	
3. Replace the front airbag, seat belt pretensioner, and the side airbag.		
MM, 723	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.	
	B.Replace the front airbag, seat belt pretensioner and the side airbag.	
	Refer to: (4.2.1 Supplemental Restraint System, Removal and Installation).	
	Is the system normal?	
	Υ	
1/3/	Confirm the maintenance is finished.	
	N	
	Go to step 4.	
4. Replace the airbag control module	'60 .	
	A.Turn the ignition switch to the position "LOCK" and disconnect the battery negative cable for at least 60 s.	
	B.Airbag control module.	
	Refer to: Airbag Control Module (4.2.1 Supplemental Restraint System, Removal and Installation).	
	Verify the system is normal.	

Removal and Installation

Driver Airbag and Steering Wheel

Removal



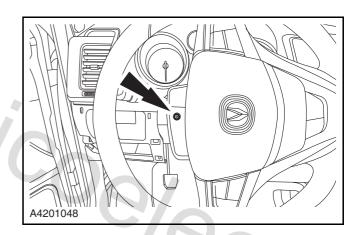
WARNING: Disconnect the battery negative cable for more than 60 seconds before the operation on the airbag.

WARNING: The product bar code on all the airbag system parts is an only permanent identification and is not allowed to tear up or pollute during the removal so that the manufacturers of the parts conduct quality tracking and performance check.

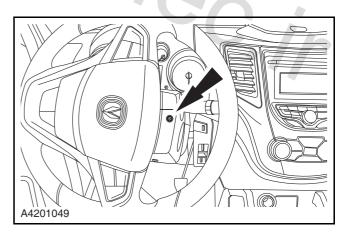
1. Disconnect the battery negative cable.

Refer to: Battery Inspection (3.1.10 Charging System, General Procedures).

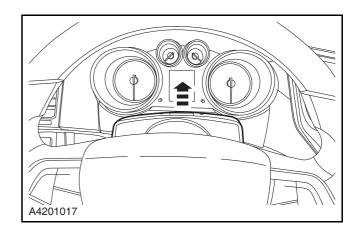
2. Remove the left side retaining bolt on the steering column upper decorative cover.



3. Remove the right side retaining bolt on the steering column upper decorative cover.

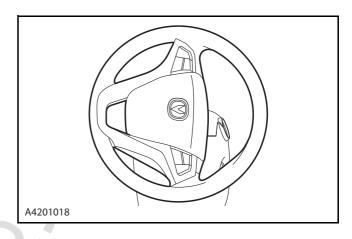


4. Remove the steering column upper decorative cover.

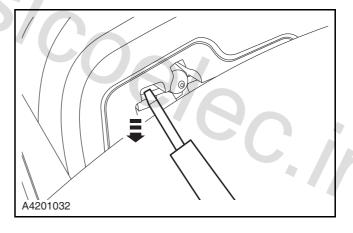


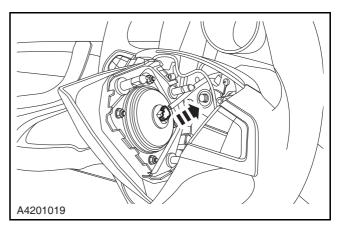
5. Rotate the steering wheel for 90° clockwise.

WWW.



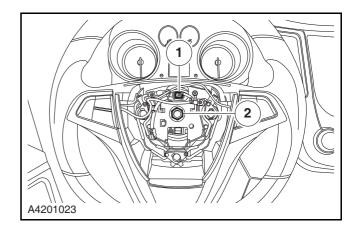
- **6.** Insert the small screwdriver in the steel wire of the airbag steel clip pin from the steering lock housing, press it downward firmly, and release the steel wire from the clip pin.
- **7.** Rotate it for 180° anticlockwise, repeat the operation in the step 6.
- **8.** Continue to rotate for 90° anticlockwise, repeat step 6, and detach the driver airbag from the steering wheel.
- **9.** Disconnect the wiring harness connector of the driver airbag.





- 10. Remove the steering wheel.
 - 1. Disconnect the wiring harness connector of the horn and the steering wheel audio control switch.
 - 2. Remove the steering wheel retaining nut.

Torque: 33 Nm



Installation

1. To install, reverse the removal procedure.

Clock Spring

Removal

₩

WARNING: Disconnect the battery negative cable for more than 60 seconds before the operation on the airbag.

WARNING: The product bar code on all the airbag system parts is an only permanent identification and is not allowed to tear up or pollute during the removal so that the manufacturers of the parts conduct quality tracking and performance check.

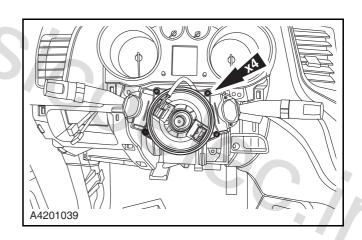
1. Disconnect the battery negative cable.

Refer to: Battery Inspection (3.1.10 Charging System, General Procedures).

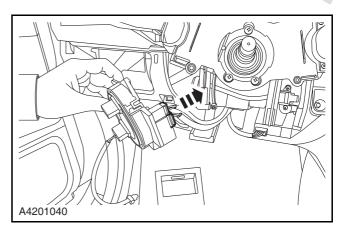
2. Remove the driver airbag and the steering wheel.

Refer to: Driver Airbag and Steering Wheel (4.2.1 Supplemental Restraint System, Removal and Installation).

3. Remove the clock spring retaining screw.



4. Disconnect the clock spring wiring harness connector and take out the clock spring.



Installation

1. To install, reverse the removal procedure.



CAUTION: Rotate the clock spring clockwise till the end during the installation of the clock spring, and rotate it for 3.2 turns anticlockwise to align it with the mark.

Side Airbag



WARNING: Disconnect the battery negative cable for more than 60 seconds before the operation on the airbag.



WARNING: The product bar code on all the airbag system parts is an only permanent identification and is not allowed to tear up or pollute during the removal so that the manufacturers of the parts conduct quality tracking and performance check.

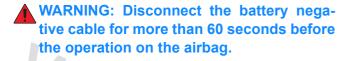
eat (5.1.c Refer to: Front Seat (5.1.3 Seat, Removal and Installation).

Passenger Airbag

Removal

Special Tool



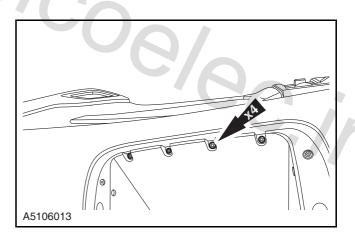


WARNING: The product bar code on all the airbag system parts is an only permanent identification and is not allowed to tear up or pollute during the removal so that the manufacturers of the parts conduct quality tracking and performance check.

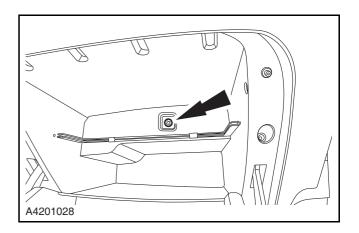
1. Disconnect the battery negative cable.

Refer to: Battery Inspection (3.1.10 Charging System, General Procedures).

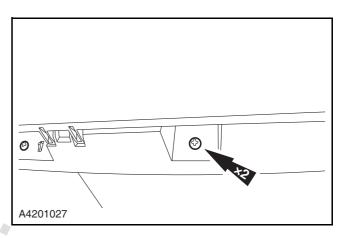
2. Remove the 4 retaining screws on the upper glove box.



3. Remove the 1 retaining screw in the glove box.



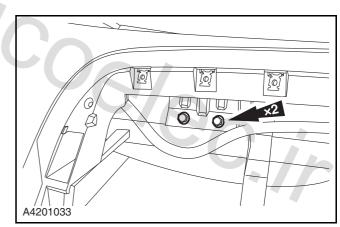
4. Remove the 2 retaining screws at the bottom of the glove box.



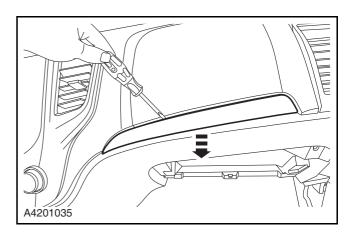
5. Remove the passenger airbag and the instrument console inner frame retaining bolts.

Torque: 9 Nm

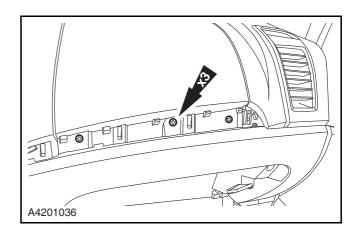
WW.



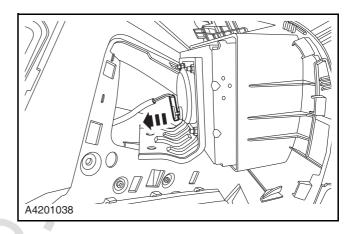
6. Use a proper tool to remove the passenger airbag upper trim strip on the Instrument.



7. Remove the retaining screw on the passenger airbag upper protecting panel on the Instrument.



8. Disconnect the passenger wiring harness connector, and remove the airbag.



COe/ec.//

Installation

Mww.na **1.** To install, reverse the removal procedure.

Airbag Control Module

Removal

1. Disconnect the battery negative cable.

Refer to: Battery Inspection (3.1.10 Charging System, General Procedures).

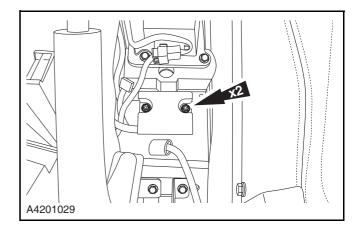
2. Remove the console.

Refer to: Console (5.1.6 Instrument and Console, Removal and Installation).

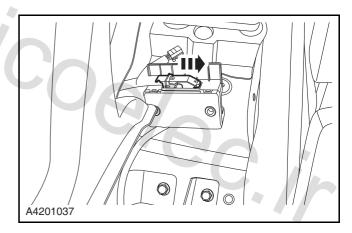
3. Remove the retaining bolts of the airbag control module.

Torque: 8 Nm

MW.



4. Disconnect the wiring harness connector of the airbag control module.



Installation

1. To install, reverse the removal procedure.



WARNING: Handle the airbag with care to avoid bang, knock and drop. Do not allow unauthorized disassembly of the controller housing. Inspect the torque value of the retaining bolt no less than 8 Nm after tightening the controller.

WARNING: The product bar code on all the airbag system parts is an only permanent identification and is not allowed to tear up or pollute during the removal so that the manufacturers of the parts conduct quality

tracking and performance check.

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Impact Sensor

Removal

1. Disconnect the battery negative cable.

Refer to: Battery Inspection (3.1.10 Charging System, General Procedures).

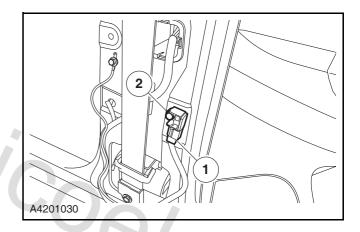
2. Remove the door threshold trim panel.

Refer to: Door Threshold Trim (5.1.9 Interior Trim and Ornamentation, Removal and Installation).

3. Remove the B-pillar trim panel.

Refer to: B-pillar Trim (5.1.9 Interior Trim and Ornamentation, Removal and Installation).

- 4. Remove the impact sensor.
 - 1. Disconnect the wiring harness connector of the impact sensor.
 - 2. Remove the impact sensor retaining bolt.



C./r

Installation

1. To install, reverse the removal procedure.